

WHAT IS CLAIMED IS:

1. An overcoat application peel apparatus for peeling a donor from a laminated printed media, comprising:

a) a support for conveying a plurality of attached laminated printed articles along a first paper path, the articles comprising at least partially resilient printed media, a layer of laminate on the article, and a removable donor on the layer of laminate;

b) a peel guide for guiding the donor to a donor take-up reel, the peel guide positioned with respect to the first paper path and the donor take-up reel so that the angle between the donor and the laminated printed media remains substantially constant as the donor take-up reel fills with donor and changes the angle at which the donor leaves the peel guide.

2. An overcoat application peel apparatus in claim 1 further comprising:

a) the first peel guide positioned on a first side of the donor; and

b) a second peel guide adjacent the first peel guide on a second side of the donor, between the donor and the laminated printed article such that the second peel guide guides the laminated printed article.

3. The overcoat application peel apparatus of claim 1 further comprising:

a) a donor guide downstream the peel guide on a second side of the donor such that the donor guide resists tension from the donor take-up reel so that the angle between the donor and the laminated printed media remains substantially constant as the donor take-up reel fills with donor and changes the angle at which the donor leaves the peel guide.

4. The overcoat application peel apparatus of claim 1 further comprising a second peel guide disposed adjacent the first peel guide and forming a nip therebetween, and in which the donor is trained through the nip and thence the donor take-up reel so that the angle between the donor and the laminated printed media remains constant.

5. The overcoat application peel apparatus of claim 4 in which one or more of the first or second peel guides comprise a roller.

6. The overcoat application peel apparatus of claim 5 further comprising an exit platen disposed at an angle to the first paper path and downstream of the second peel guide.

7. The overcoat application peel apparatus of claim 6 further comprising a second peel guide disposed adjacent to the first paper path and sufficiently close to the exit platen so that the laminated printed media resiliently bends around the second peel guide and releases the laminated printed media at a trailing edge of the article downstream the first peel guide.

8. The overcoat application peel apparatus of claim 6 in which the exit platen is disposed with respect to the second peel guide such that the laminated printed media bends around the second peel guide.

9. The overcoat application peel apparatus of claim 7 further comprising a paper support adjacent the printed media at a media lead edge proximate the first peel guide to support the printed media.

10. The overcoat application peel apparatus of claim 9 wherein the paper support further comprises a curve spring.

11. The overcoat application peel apparatus of claim 10 wherein the primary guide has a guide length perpendicular to the first paper path, the primary guide including a guide edge, a guide center, and a guide diameter that varies with the guide length.

12. The overcoat application peel apparatus of claim 11 such that the guide diameter is less at the guide edge than at the guide center.

13. An overcoat application peel apparatus for peeling a donor from a laminated printed media, comprising:

a) a support for conveying a plurality of attached laminated printed articles along a first paper path, the articles comprising at least partially resilient printed media, a layer of laminate on the article, and a removable donor on the layer of laminate;

b) an exit platen disposed at an angle to the first paper path and downstream of the first paper path.

14. The application peel apparatus of claim 13 further comprising:

a) the exit platen positioned to support the laminated printed media;

b) a peel guide for guiding the removable donor to a donor take-up reel, the peel guide positioned with respect to the first paper path and the donor take-up reel so that the angle between the donor and the laminated printed media remains substantially constant as the donor take-up reel fills with donor and changes the angle at which the donor leaves the peel guide.

15. The overcoat application peel apparatus of claim 14 in which the peel guide comprises a roller.

16. The overcoat application peel apparatus of claim 15 further comprising a paper support adjacent the printed media at a media lead edge proximate the peel guide to support the printed media

17. The overcoat application peel apparatus of claim 16 wherein the paper support further comprises a curve spring.

18. The overcoat application peel apparatus of claim 17 wherein the peel guide has a guide length perpendicular to the first paper path, the peel guide including a guide edge, a guide center, and a guide diameter that varies with the guide length.

19. The overcoat application peel apparatus of claim 18 such that the guide diameter is less at the guide edge than at the guide center.

20. An overcoat application apparatus comprising:

a) an entry roller for accepting printed media from a printer;

- b) a donor supply reel to supply a laminate carrying donor comprising a laminate and a donor;
- c) a heated fuser guide to apply heat to the laminate carrying donor and the printed media;
- d) a pressure guide engaging the fuser guide in order to produce a mechanical nip;
- e) a donor guide that guides the laminate carrying donor into the nip formed by the heated fuser guide and the pressure guide;
- f) an overcoat application peel apparatus for peeling a donor from a laminated printed media, comprising:
 - (i) a support for conveying a plurality of attached laminated printed articles along a first paper path, the articles comprising at least partially resilient printed media, a layer of laminate on the article, and a removable donor on the layer of laminate;
 - (ii) a peel guide for guiding the donor to a donor take-up reel, the peel guide positioned with respect to the first paper path and the donor take-up reel so that the angle between the donor and the laminated printed media remains substantially constant as the donor take-up reel fills with donor and changes the angle at which the donor leaves the peel guide.; and
- g) an exit roller which accepts the overcoated printed material and transports it to the next required process station.

21. The overcoat application apparatus of claim 20 wherein the overcoat application peel apparatus further comprises:

- a) the first peel guide positioned on a first side of the donor; and

b) a second peel guide adjacent the first peel guide on a second side of the donor, between the donor and the laminated printed article such that the second peel guide guides the laminated printed article.

22. The overcoat application apparatus of claim 20 further comprising:

a) a donor guide downstream the peel guide on a second side of the donor such that the donor guide resists tension from the donor take-up reel so that the angle between the donor and the laminated printed media remains substantially constant as the donor take-up reel fills with donor and changes the angle at which the donor leaves the peel guide.

23. The overcoat application apparatus of claim 20 further comprising a second peel guide disposed adjacent the first peel guide and forming a nip there between, and in which the donor is trained through the nip and thence the donor take-up reel so that the angle between the donor and the laminated printed media remains constant.

24. The overcoat application peel apparatus of claim 23 in which one or more of the first or second peel guides comprise a roller

25. The overcoat application peel apparatus of claim 24 further comprising an exit platen disposed at an angle to the first paper path and downstream of the second peel guide.

26. The overcoat application apparatus of claim 25 further comprising a second peel guide disposed adjacent to the first paper path and sufficiently close to the exit platen so that the laminated printed media resiliently bends around the second peel guide and releases the laminated printed media at a trailing edge of the article downstream the first peel guide.

27. The overcoat application apparatus of claim 25 in which the exit platen is disposed with respect to the second peel guide such that the laminated printed media bends around the second peel guide.

28. The overcoat application apparatus of claim 26 further comprising a paper support adjacent the printed media at a media lead edge proximate the first peel guide to support the printed media.

29. The overcoat application apparatus of claim 28 wherein the paper support further comprises a curve spring.

30. The overcoat application apparatus of claim 29 wherein the primary guide has a guide length perpendicular to the first paper path, the primary guide including a guide edge, a guide center, and a guide diameter that varies with the guide length.

31. The overcoat application apparatus of claim 30 such that the guide diameter is less at the guide edge than at the guide center.